

# Main switch, 6 pole, 100 A, Emergency-Stop function, 90 °, Lockable in the 0 (Off) position, surface mounting

Powering Business Worldwide\*

Part no. T5-3-8342/I5/SVB Article no. 207279

#### **Delivery program**

Delivery program			
Product range			Main switch maintenance switch Repair switch
Part group reference			T5
Stop Function			Emergency switching off function
			With red rotary handle and yellow locking ring
Number of poles			6 pole
Locking facility			Lockable in the 0 (Off) position
Degree of Protection			IP65
			totally insulated
Design			surface mounting
Contact sequence			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Switching angle		0	90
Function			O OFF
Motor rating AC-23A, 50 - 60 Hz			
400 V	Р	kW	55
Rated uninterrupted current	I <sub>u</sub>	Α	100
Number of contact units		contact unit(s)	3

# **Technical data**

### General

General			
Standards			IEC/EN 60947, VDE 0660, IEC/EN 60204 Switch-disconnector according to IEC/EN 60947-3
Climatic proofing			Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
Ambient temperature			
Enclosed		°C	-25 - +40
Overvoltage category/pollution degree			111/3
Rated impulse withstand voltage	U <sub>imp</sub>	V AC	6000
Mechanical shock resistance		g	15
Mounting position			As required
Protection against direct contact when actuated from front (EN 50274)			Finger and back-of-hand proof
Contacts			
Mechanical variables			

Number of poles			6 pole
Electrical characteristics			V pole
Rated operational voltage	U <sub>e</sub>	V AC	690
Rated uninterrupted current	l <sub>u</sub>	A	100
	'u	^	Rated uninterrupted current lu is specified for max. cross-section.
Note on rated uninterrupted current !u			nateu uninterrupteu current iu is specineu ior max. cross-section.
Load rating with intermittent operation, class 12			
AB 25 % DF		x I <sub>e</sub>	2
AB 40 % DF		x I <sub>e</sub>	1.6
AB 60 % DF		x l <sub>e</sub>	1.3
Short-circuit rating			
Fuse		A gG/gL	100
Rated short-time withstand current (1 s current)	I <sub>cw</sub>	A <sub>rms</sub>	1700
Note on rated short-time withstand current lcw			Current for a time of 1 second
Rated conditional short-circuit current	Iq	kA	2
Switching capacity			
cos φ rated making capacity as per IEC 60947-3		Α	950
Rated breaking capacity cos φ to IEC 60947-3		Α	
230 V		A	760
400/415 V		A	740
500 V		Α	590
690 V		Α	420
Safe isolation to EN 61140			
between the contacts		V AC	440
Current heat loss per contact at l <sub>e</sub>		W	7.5
Current heat loss per auxiliary circuit at I <sub>e</sub> (AC-15/230 V)		CO	7.5
Lifespan, mechanical	Operations	x 10 <sup>6</sup>	> 0.5
Maximum operating frequency	Operations/h		1200
AC			
AC-3			
Rating, motor load switch	P	kW	
220 V 230 V	P	kW	22
230 V Star-delta	P	kW	30
400 V 415 V	P	kW	30
400 V Star-delta	P	kW	45
500 V	P	kW	30
500 V Star-delta	P	kW	45
690 V	P	kW	15
690 V Star-delta	P	kW	22
Rated operational current motor load switch			
230 V	I <sub>e</sub>	Α	71
230 V star-delta	l <sub>e</sub>	Α	100
400V 415 V	l <sub>e</sub>	Α	55
400 V star-delta	l <sub>e</sub>	Α	95.3
500 V	l <sub>e</sub>	Α	44
500 V star-delta	I <sub>e</sub>	Α	76.2
690 V	l <sub>e</sub>	A	17
690 V star-delta			29.4
	l <sub>e</sub>	Α	£J. <del>T</del>
AC-21A			
Rated operational current switch		Δ.	100
440 V	l <sub>e</sub>	Α	100
AC-23A			
Motor rating AC-23A, 50 - 60 Hz	P	kW	
230 V	Р	kW	30
400 V 415 V	P	kW	55

## **Design verification as per IEC/EN 61439**

Design verification as per IEC/EN 61439			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	100
Heat dissipation per pole, current-dependent	$P_{\text{vid}}$	W	7.5
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	0
Static heat dissipation, non-current-dependent	$P_{vs}$	W	0
Heat dissipation capacity	P <sub>diss</sub>	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	40
EC/EN 61439 design verification			
10.2 Strength of materials and parts			
10.2.2 Corrosion resistance			Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures			Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat			Meets the product standard's requirements.
10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects $$			Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation			Please enquire
10.2.5 Lifting			Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 Mechanical impact			Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 Inscriptions			Meets the product standard's requirements.
10.3 Degree of protection of ASSEMBLIES			Does not apply, since the entire switchgear needs to be evaluated.
10.4 Clearances and creepage distances			Meets the product standard's requirements.
10.5 Protection against electric shock			Does not apply, since the entire switchgear needs to be evaluated.
10.6 Incorporation of switching devices and components			Does not apply, since the entire switchgear needs to be evaluated.
10.7 Internal electrical circuits and connections			Is the panel builder's responsibility.
10.8 Connections for external conductors			Is the panel builder's responsibility.
10.9 Insulation properties			
10.9.2 Power-frequency electric strength			Is the panel builder's responsibility.
10.9.3 Impulse withstand voltage			Is the panel builder's responsibility.
10.9.4 Testing of enclosures made of insulating material			Is the panel builder's responsibility.

10.10 Temperature rise	The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 Short-circuit rating	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.12 Electromagnetic compatibility	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.13 Mechanical function	The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

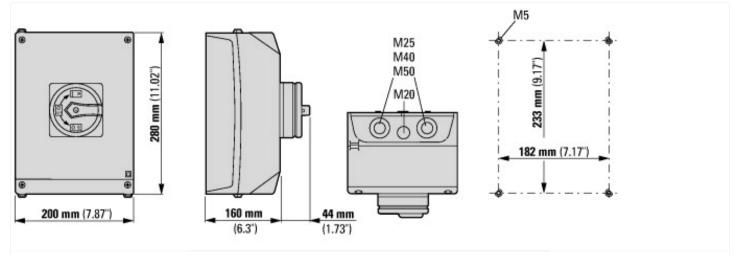
#### **Technical data ETIM 6.0**

Low-voltage industrial components (EG000017) / Switch disconnector (EC000216)

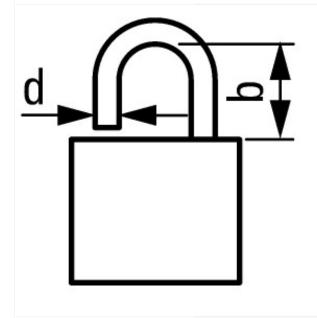
Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnector (ecl@ss8.1-27-37-14-03 [AKF060010])

[AKF060010])		
Version as main switch		Yes
Version as maintenance-/service switch		Yes
Version as safety switch		No
Version as emergency stop installation		Yes
Version as reversing switch		No
Max. rated operation voltage Ue AC	V	690
Rated operating voltage	V	690 - 690
Rated permanent current lu	А	100
Rated permanent current at AC-21, 400 V	Α	100
Rated operation power at AC-3, 400 V	kW	30
Rated short-time withstand current lcw	kA	1.7
Rated operation power at AC-23, 400 V	kW	55
Switching power at 400 V	kW	55
Conditioned rated short-circuit current Iq	kA	2
Number of poles		6
Number of auxiliary contacts as normally closed contact		0
Number of auxiliary contacts as normally open contact		0
Number of auxiliary contacts as change-over contact		0
Motor drive optional		No
Motor drive integrated		No
Voltage release optional		No
Device construction		Complete device in housing
Suitable for ground mounting		Yes
Suitable for front mounting 4-hole		No
Suitable for front mounting center		No
Suitable for distribution board installation		No
Suitable for intermediate mounting		No
Colour control element		Red
Type of control element		Door coupling rotary drive
Interlockable		Yes
Type of electrical connection of main circuit		Screw connection
Degree of protection (IP), front side		IP65

#### **Dimensions**



Cam switches T5B and T5 are of identical design, only their contacts are different



d = 4 - 8 mm  $b + d \le 47 \text{ mm}$  d = 0.16 - 0.31  $d + d \le 1.85$ 

≦ 3 padlocks

## **Additional product information (links)**

•		
IL03801009Z (AWA1150-1692) Cam switch: switch-disconnector		
IL03801009Z (AWA1150-1692) Cam switch: switch-disconnector	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03801009Z2016_07.pdf	
Form for ordering non-standard front plates	http://ecat.moeller.net/flip-cat/?edition=HPLEN&startpage=4.87	
Display flip catalog page.	http://ecat.moeller.net/flip-cat/?edition=K115A&startpage=130	
Technical overview cam switch, switch-disconnector	http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.2	
System overview cam switch T	http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.4	
System overview switch-disconnector P	http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.6	
Key to part numbers Cam switch	http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.8	
Key to part numbers Switch-disconnector	http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.8	
Switches for ATEX	http://www.coopercrouse-hinds.eu/en/products/25-ex-safety-and-main-current-switches.html	